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DocuFold Pro (CB/UL)

OPERATORS MANUAL

Automatic Paper Folding Machine

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morgana **Docufold Pro**

The Morgana Docufold Pro is a brand new concept automatic paper folding machine designed to be used in today's environment of document production. The Morgana DocuFold Pro can be used by non-skilled personnel by following this easy to use operator's guide. There are very few operator adjustments required and in conjunction with our new 'Smart screen' you will get started very quickly, but we do recommend that you take a little time to read this manual, to ensure that you fully understand the machine. We have also included a TIPS & TROUBLE SHOOTING section. Be sure to read this section before calling a service engineer to avoid any unnecessary expense.

On the DocuFold Pro. The fold plates and delivery roller will move automatically according to the type of fold selected. Please be aware that different weights, humidity, temperature or the grain direction of the paper may make the paper fold in a different position according to the material.
Some manual adjustment may sometimes be necessary to obtain the exact fold plate position for each type of paper.

IMPORTANT

The operating environment should be controlled to a temperature between 16° C and 27° C Maximum

Specification

Feeding System ..... Bottom suction feed
Max. Sheet Size ..... 674mm x 365mm (26.5” x 14.4”)
Min. Sheet Size (in automatic mode)..... 160mm x 140mm (6.3” x 5.5”)
Max. Paper Weight ..... 240gsm Max. (0.24mm thick) according to hardness, type of fold, grain direction and substrate
Min. Paper Weight ..... 56gsm (0.08mm thick)
Max. No. Folds per Sheet 2
Max. Fold Length long plate..... 328mm (12.91”)
Max. Fold Length short plate..... 225mm (8.85”)
Max. No. Stored Programmes ..... Unlimited
Speed per Hour (A4 Material) .....27500 sheets (Stream Feed)
17250 sheets (Pulsed Feed)
Speed per Hour (A3 Material) .....18000 sheets (Stream Feed)
13250 sheets (Pulsed Feed)

Note: The production speed varies according to the material size.

Dimensions ..... L: 1240mm H: 1370mm W: 555mm
L: (48.8”) H: (53.9”) W: (21.8”)
Weight ..... 132Kgs (+50Kgs packing)
Power Requirement ..... 1 phase 230v 50Hz
1 phase 220v 60Hz
Sound Power Level ..... 96.0 decibels

*As part of our continued product improvement plan, specifications and information published in this manual are subject to change without notice.
All specifications are dependant on application, type of stock, temperature, RH and print engine used.
Specifications quoted were measured on uncoated and unprinted stock. E & OE.

Safety Do's & Don'ts

REGLES DE SECURITE : « A FAIRE » ET « A NE PAS FAIRE »

Do - read this operator manual fully before operating the machine.
Lire ce mode d'emploi avant d'utiliser la machine.

Do - operate with the designated AC current only. Use an exclusive outlet, as overloading may cause fire or an electric shock.
Respecter l'alimentation électrique indiquée. Brancher sur une prise séparée car une surcharge peut entraîner un incendie ou un choc électrique.

Do - install the power cord out of the way to avoid a tripping hazard.
Installer le cordon d'alimentation de manière à ne pas pouvoir trébucher par dessus.

Do - make sure that the mains inlet connector is always easily accessible.
Ménager un accès libre à la prise de courant.

Do - Fit the yellow outrigger feet, (supplied in the Dispatch Kit), to the front and back of the machine as shown on Page 7; to comply with safety regulations.
Fixer les pieds stabilisateurs jaune, (fourni dans le kit d'expédition), à l'avant et l'arrière de la machine comme indiqué sur la page 7; pour se conformer aux règlements de sécurité.

Do not - install the machine in an unstable place such that it tilts or shakes.
Ne pas installer la machine sur une surface non plane, afin d'éviter qu'elle ne penche ou ne vibre.

Do not - unplug the plug or unplug the power cord from the outlet with a wet hand, this can cause an electric shock.
Ne pas installer la machine sur une surface non plane, afin d'éviter qu'elle ne penche ou ne vibre.

Do not - unscrew and remove any covers from the machine, as it can cause an electric shock or injury.
Ne démonter et enlever aucun carter de la machine, par crainte de décharge électrique ou de blessure.

Do not - place receptacles containing liquids on any surface.
Ne pas placer de récipient contenant un liquide sur la machine.

Do not - adjust any part of the machine whilst rollers are running
N'effectuer aucun réglage pendant que les rouleaux fonctionnent.

Do not - operate the machine with loose or trailing clothing or loose hair.
Ne pas porter de vêtements flottants et rassembler les cheveux longs lors de l'utilisation de la machine.

Do not - under any circumstances adjust the paper gate when the machine is switched on.
En aucune circonstance, régler le séparateur de papier lorsque la machine est branchée.

Warning Labels

Do - be aware of any finger traps and rotating parts when operating the machine.
Attention au risque de se coincer les doigts, et aux pièces en mouvement lors du fonctionnement de la machine.

Do - read this operator manual fully before operating the machine.
Lire ce mode d'emploi avant d'utiliser la machine.

Do not - operate the machine with loose or trailing clothing.
Ne pas porter de vêtements flottants lors de l'utilisation de la machine

Do not - operate the machine with loose hair.
Rassembler les cheveux longs lors de l'utilisation de la machine.

Do - be aware of any finger traps and rotating parts when operating the machine.
Attention au risque de se coincer les doigts, et aux pièces en mouvement lors du fonctionnement de la machine.

Do - be aware of sharp points and blades.
Attention aux éléments tranchants et aux couteaux.

Do - be aware of rotating rollers.
Attention aux rouleaux en fonctionnement

Do - be aware of low current anti-static shock.
Attention aux faibles chocs d'électricité statique

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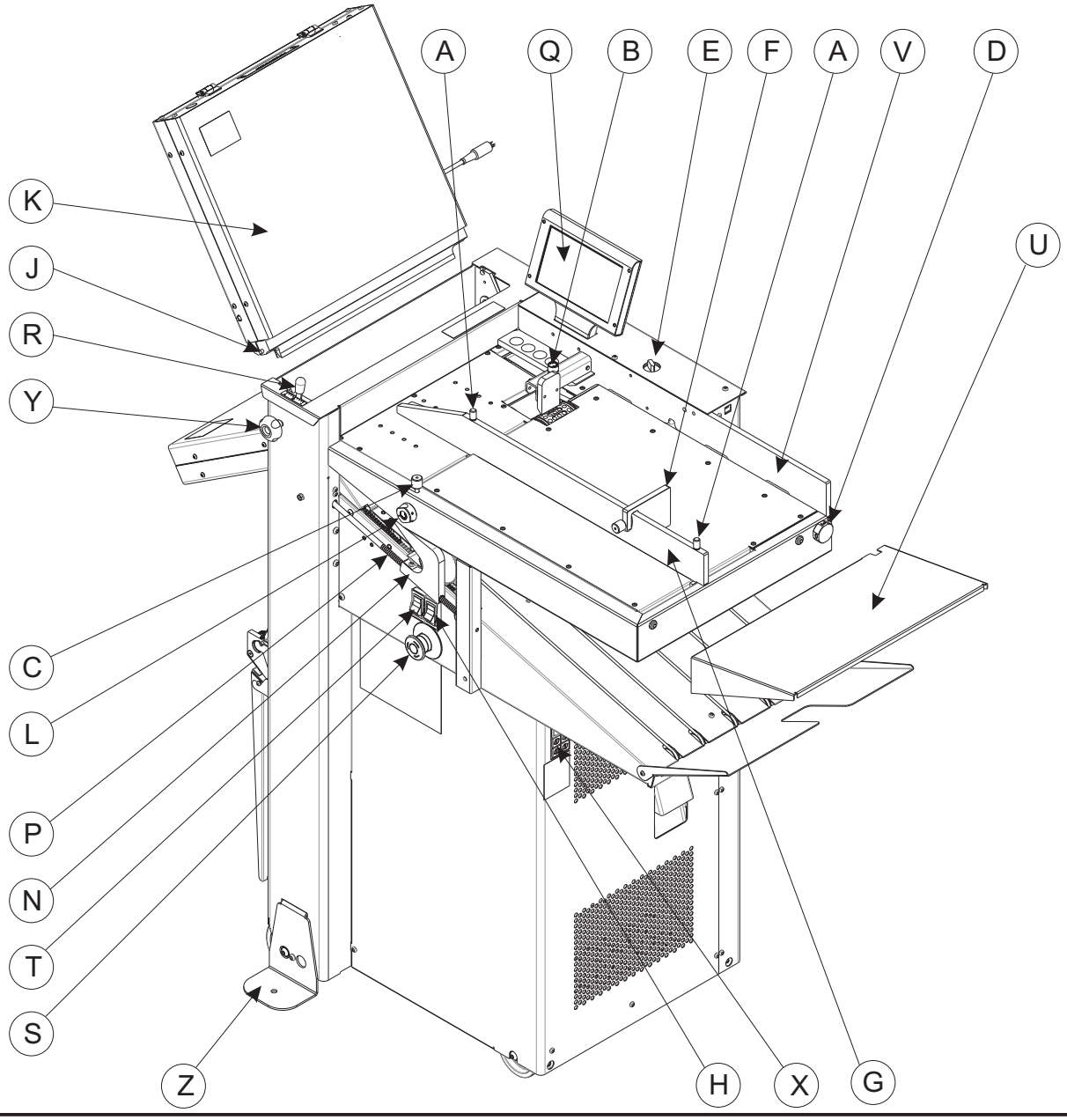
Docufold Pro

AUTOMATIC PAPER FOLDING MACHINE

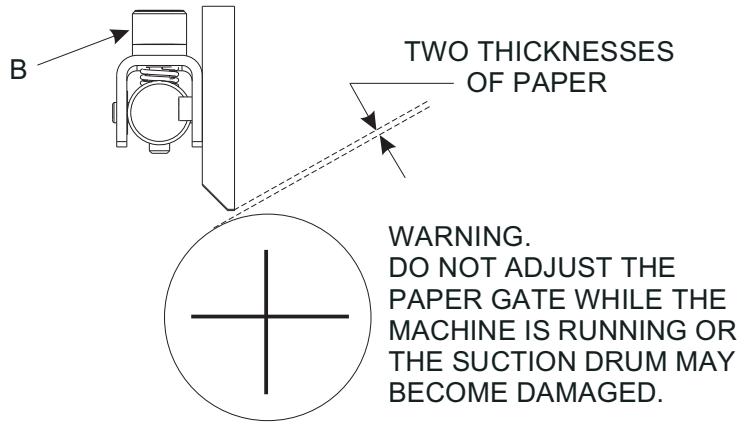
Key to drawing below

A Moving side lay knob
B Paper gate knob
C Suction slot knob
D Air distribution knob
E Air separation knob
F Back Stop
G Moving side lay
H System switch
J Front pins
K Upper fold plate
L Vacuum bleed knob
N Delivery roller
P Lead screw
Q Touch screen
R Roller Tilt lever
S Emergency stop switch
T Compressor switch
U Extension table
V Fixed side lay
X Fuses
Y Roller assy. release knob
Z Outrigger Foot



ADJUSTING THE PAPER GATE

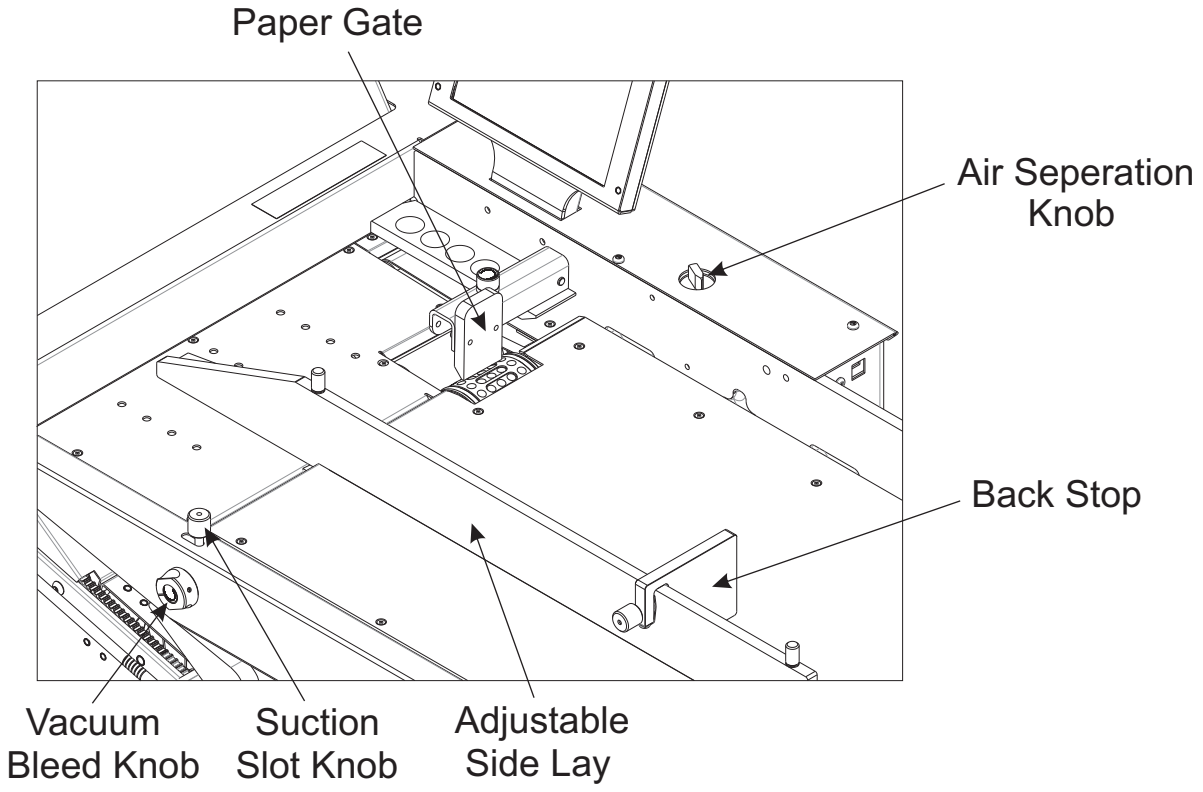
Adjust the height of the paper gate using knob (B) (clockwise to lower, anti-clockwise to raise) so that the clearance above the vacuum roller is two thicknesses of the paper to be folded. Do not make this adjustment, when the face of the paper gate is above a hole in the vacuum roller, if it is, rotate the vacuum roller by hand to bring the metal between holes below the paper gate.



On this machine, the paper gate is fixed in an optimum position and cannot be moved backwards and forwards (horizontally).

SETTING THE SUCTION SLOT

The suction slot inside the suction drum, may be adjusted by releasing knob (C) and swinging the knob in the desired position. Lighter stocks including bond will run best with the knob set to the left. For heavier stocks and curled-up stock, move the knob (C) to the right until a satisfactory position is obtained.



SETTING THE VACUUM BLEED (L).
Situated on the front of the feed table, the Vacuum Bleed Knob is used to allow more control of the suction on the vacuum drum.
When light weight paper of 90gsm and lower is being fed through the machine turn the knob clockwise to reduce the possibility of marking, or damage to the leading edge of the paper.

SETTING THE ADJUSTABLE SIDE LAY
Place a single sheet of the job onto the loading table.

Release the side lay clamp screws (A) and slide the side lay just up to the sheet so that there is about half a millimetre clearance or 1/64 inch

Tighten the clamp screws.

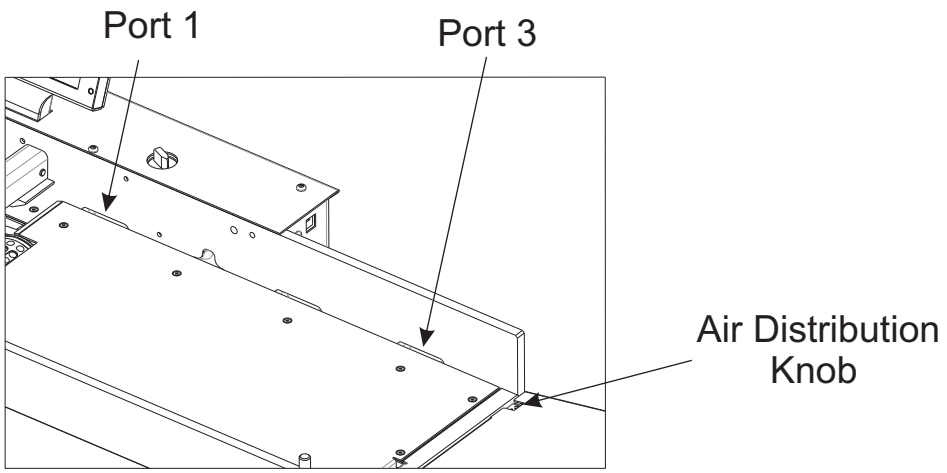
SETTING THE BACK STOP (F)
This is placed up to the end of the paper stack and clamped to the moving side lay (G).

SETTING THE AIR DISTRIBUTION KNOB (D)
Depending on the length of the sheet, the air distribution knob (D) should be rotated to supply the air to the correct ports as follows -

Position 1 - This is for short sheets A5 or 8" long with only port 1 open.
Position 2 - This is for sheets A4 or 11" long with the front port and port 2 open.
Position 3 - This is for the longest sheets A3 or 17" with the front port and port 3 open.
Position 0 - In this position, only port 2 is open and can be used on long sheets with the curl up where you need to blow air into the centre of the stack.

These setting positions are only a guide and some experimentation may obtain a better result with non-standard settings.

(Note) Position 1 feeds most paper stocks and sizes; thus the air distribution knob can be left in this position for most jobs.



SETTING THE AIR SEPARATION KNOB (E)
This knob controls the amount of air that is fed to the paper. The machine would normally run with this knob set at the 'High' position. If the machine is run with less than approximately 20 sheets on the loading table, or running the job to the last sheet, this knob should be set to the low position.

FOLD PLATES

ALWAYS UNPLUG POWER CONNECTIONS BEFORE REMOVING FOLD PLATES.

Fitting

Fit the fold plates into their respective positions (long fold plate upper and short plate lower), by locating the front pins (J) into the long slots and carefully sliding forwards (without twisting) until the rear pins can be located into the short slots. When fully in position, pull down the fold plate to lock into position. Connect the push-in power connectors - short lead to upper plate & long lead to lower plate.

Settings

The fold plate lengths are set automatically.

Fold plate Tilt

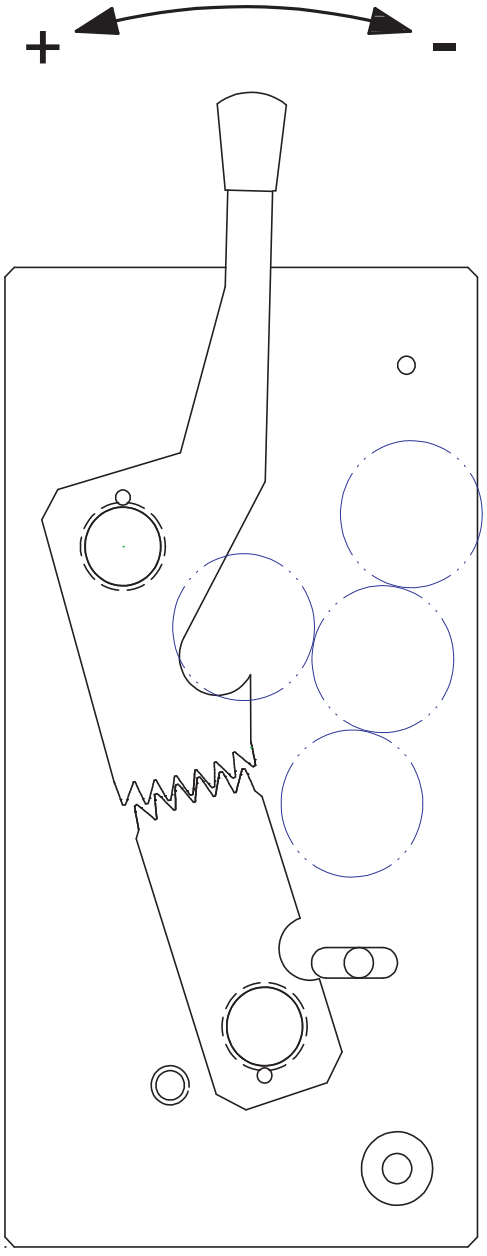
See roller tilt.

IMPORTANT NOTE:-

If any of the fold plates, or the plug in perforator unit are removed from the machine; the guard circuit is automatically broken, for safety reasons, to prevent the fold rollers from rotating.

Roller Tilt

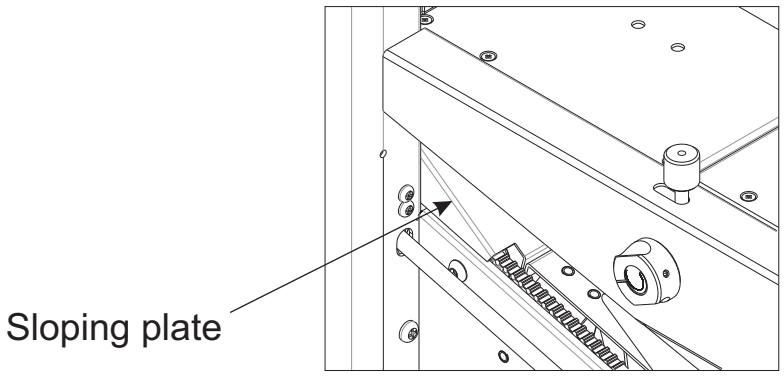
Lever (R) should always be set in the '0' (square) position. To adjust folding out of square you can move the roller assembly in the + or - direction by releasing knobs (Y) and moving lever (R) - always re-tighten Knobs (Y)



Delivery Roller

The delivery roller will adjust automatically according to the paper length and the fold type selected. Manual or fine adjustment for the position of the delivery roller can be made as shown on Page 19.

You should adjust the roller position so that when the work is stopped by the delivery roller, it lies flat on the delivery without lying on the sloping plate, (See Diagram below), and without the green belts showing between the sloping plate and the folded sheet.

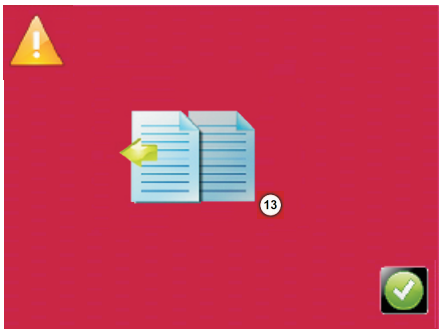


Emergency Stop Switch (S)

This switch also serves as the main isolator. **It is important that the machine is switched off at the end of the days running, press this switch to isolate the machine.** To switch back on, rotate the switch head clockwise.

Overlap

The machine has a built in system that will detect any sheet that overlaps another sheet by at least 20mm. When this happens feeding will stop and the main switch will switch off, preventing serious jams. The error screen (shown below) will be displayed on the touchscreen.. Note that this is not a double detector and will not detect all double sheet feeds. However the overlap system is an indication of a tendency to double sheet feed and therefore the paper gate should be lowered slightly and the paper stack should be fanned out more thoroughly.



TOUCHSCREEN OPERATION

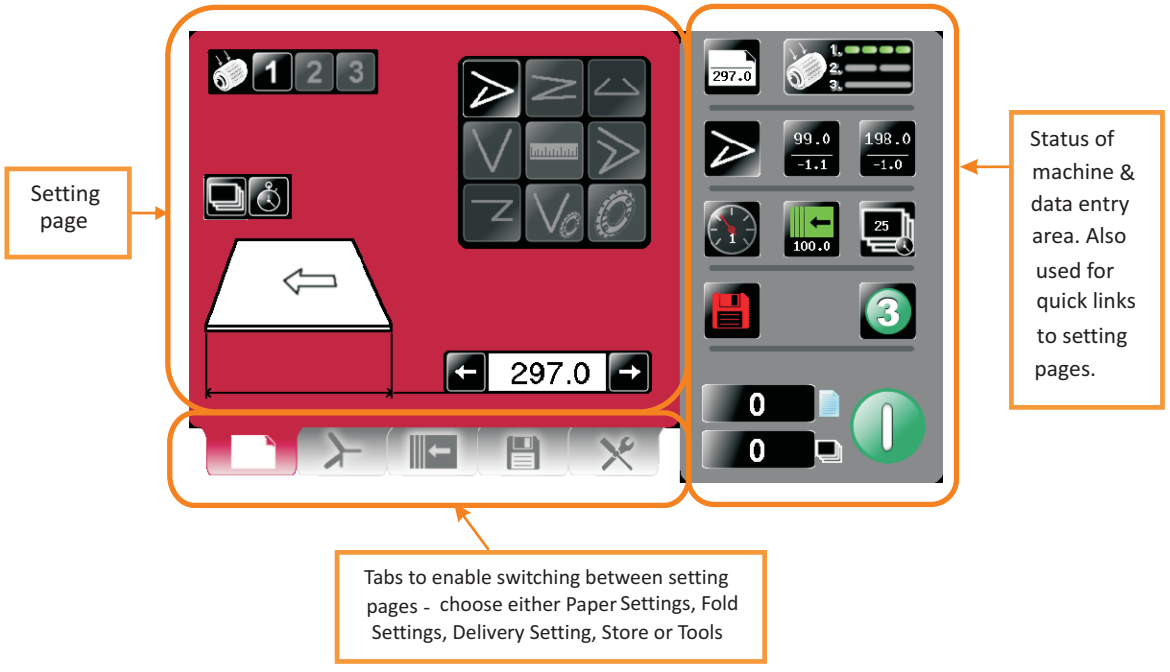
1. Turn the Emergency Stop button clockwise to switch the power on. After the system start up procedure the touch screen will be displayed as shown below.

Are you trained to operate this machine?
Etes-vous formés pour utiliser cette machine?
Sind Sie trainiert für den Betrieb dieser Maschine?
¿Está capacitado para operar esta máquina?

IMPORTANT.
If you have not been trained to operate this machine, we strongly advise that you select the red cross icon.
We recommend that you either seek training or ask a trained operator to run the machine for you.
Select the green tick icon only if you have been trained to operate this machine.
If you have not been trained to operate this machine and you select the green tick icon, Morgana Systems Ltd accept no responsibility for personal injury, damage to the machine or damage to materials being processed by the machine.

WARNING:-
Wait at least 10 seconds, after making any selection on the Touchscreen panel, before switching the machine OFF. Failure to do so could result in the data storage being corrupted, and the machine not operating.

The touch screen is laid out into 3 main areas as shown below:


Setting page
Status of machine & data entry area. Also used for quick links to setting pages.
Tabs to enable switching between setting pages - choose either Paper Settings, Fold Settings, Delivery Setting, Store or Tools

Setting Pages.

Paper settings Page

Vacuum suck – There are three selections available – 1 short suck, 2 long suck & 3 continuous for stream feeding.

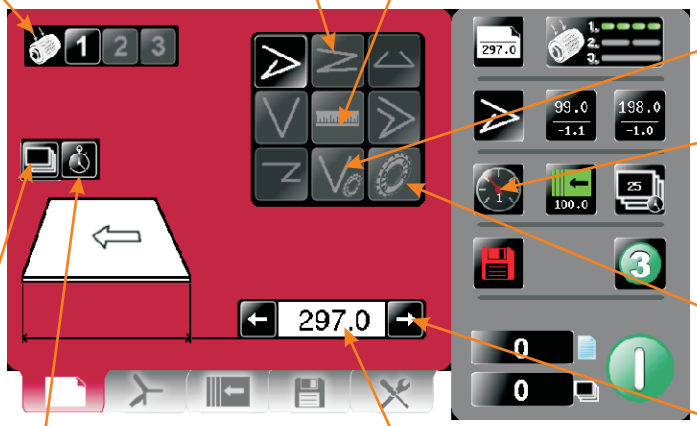
Highlighted number is type currently selected.

The status area also shows the currently selected suck.

Fold Selection – For quick setting of crease positions on standard size sheets.

Highlighted fold is type currently selected, other folds may be selected. Currently selected fold is shown in status area.

Select the Ruler icon to set the fold positions manually.



Perforating / scoring with fold button.

Speed Selector – On selection a speed adjustment screen will appear.

Perforating / scoring button.

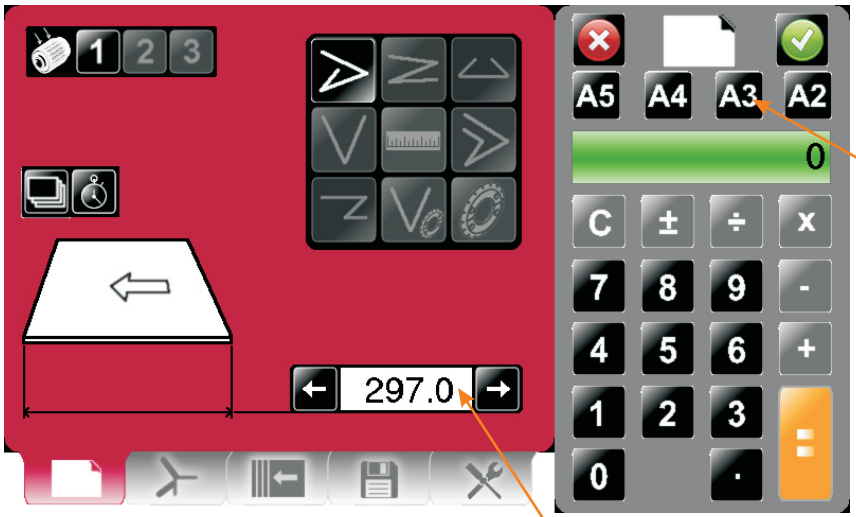
Arrows may be selected to increase or decrease the page size in 0.1mm increments.

Batch Button – Image is identical to that shown in the status area. On selection the status area is replaced with a calculator for inputting new values. Batch sizes of 1 to 998 may be set.

Toggle between, Delay between batches and stop after batch

Page Length – On selection the status area is replaced with a calculator for inputting new values. Length range = 190mm – 900mm

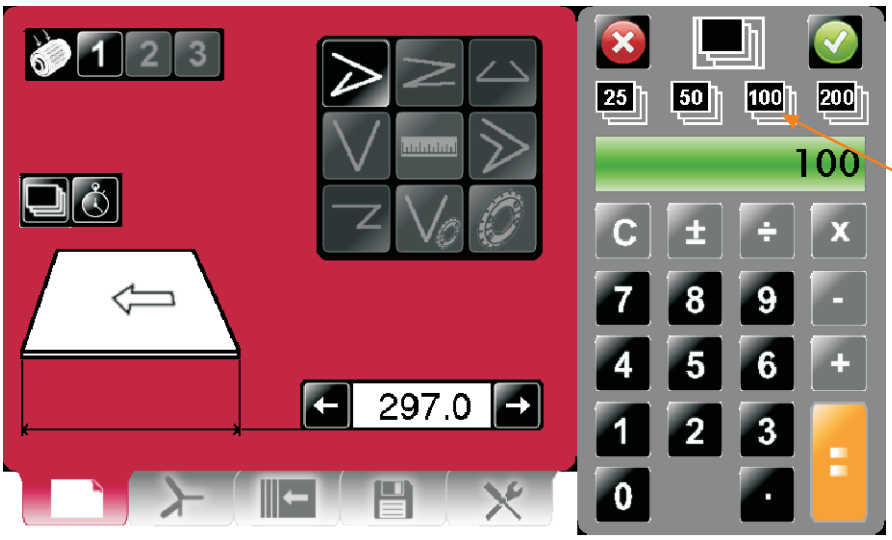
Paper size Selection.



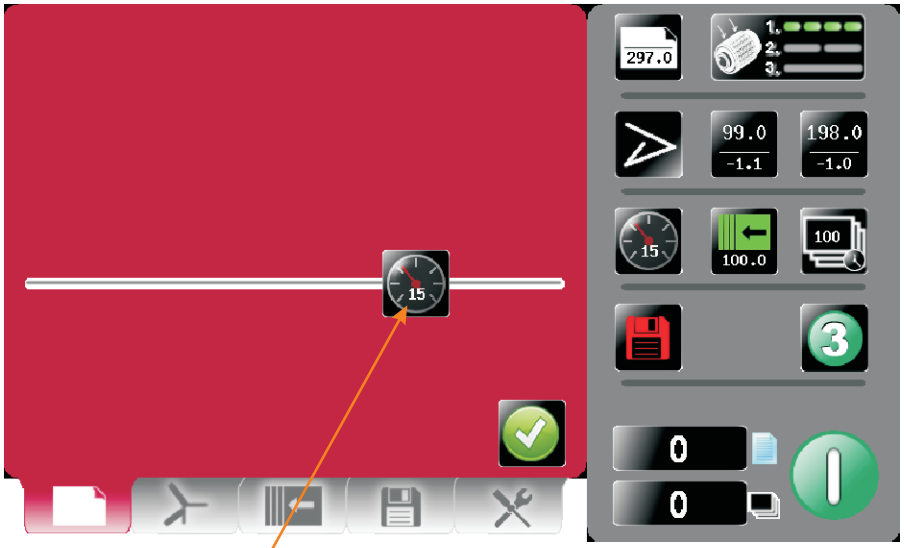
Pre-set Paper sizes for quick insertion - Standard sizes for country origin would be shown.

Paper length input

Batch size Selection.



Speed Selection

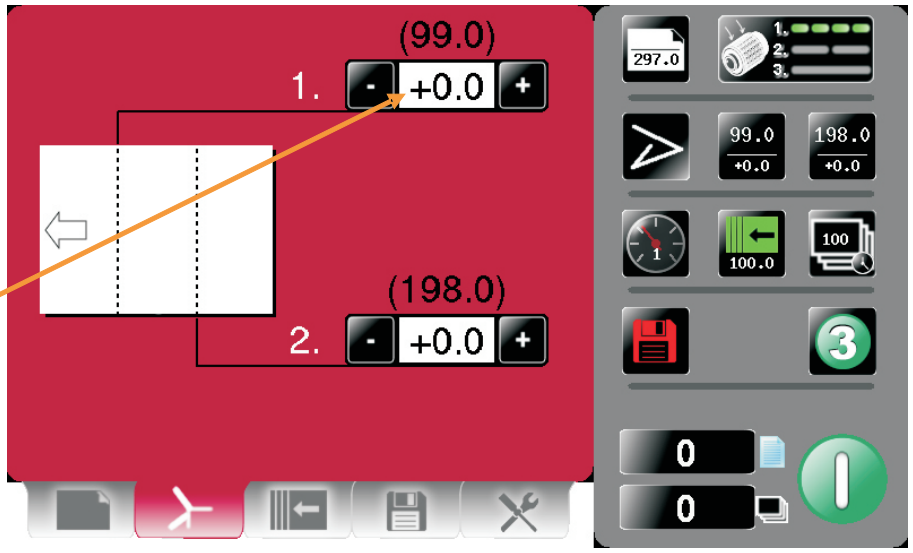


Fold Settings Pages.

To get to the Fold setting page click the lower tab .

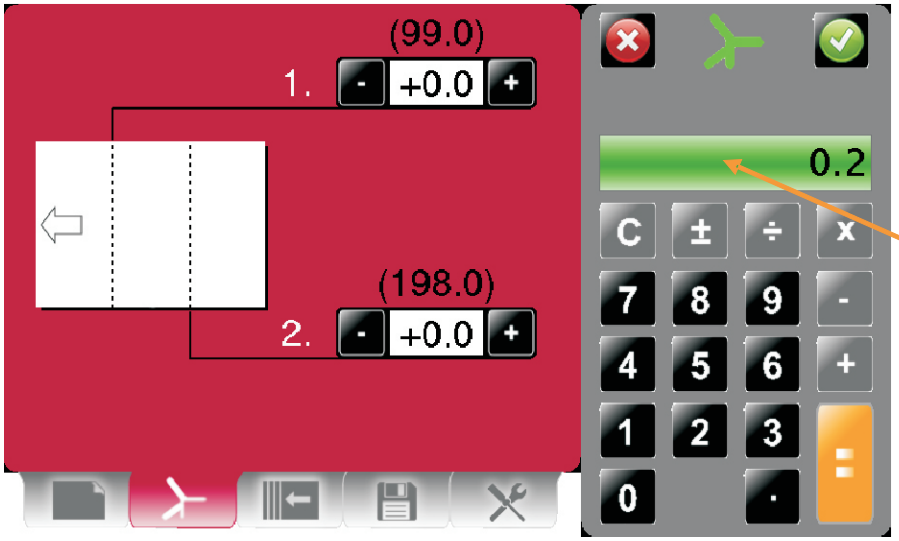
Pre- defined Standard Folds.

If you have selected a pre-defined standard Fold Type from the paper settings page the recommended fold positions will be shown in parenthesis and can be micro adjusted as required.



Fold 1 micro adjust – On selection the status area is replaced with a calculator for inputting new values.

Micro adjust range is -5.0 to +5.0 with increments of 0.1mm

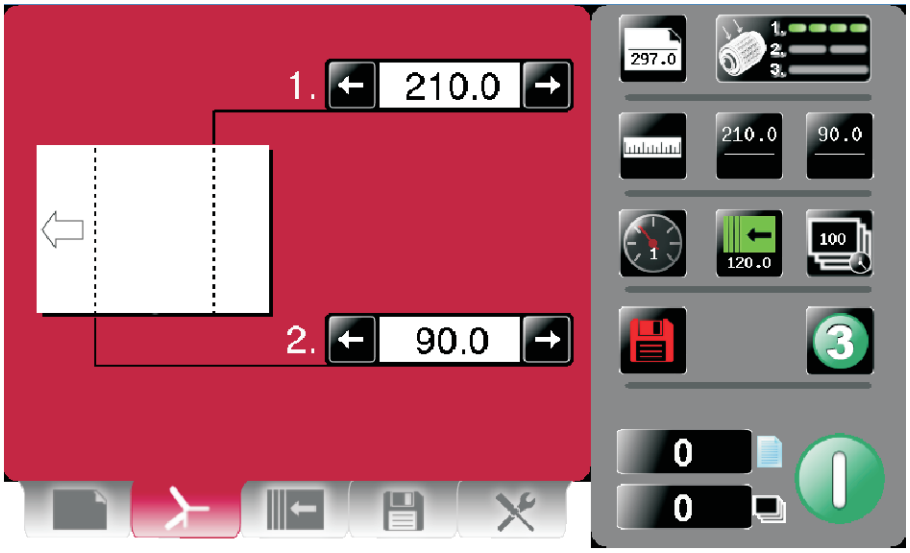


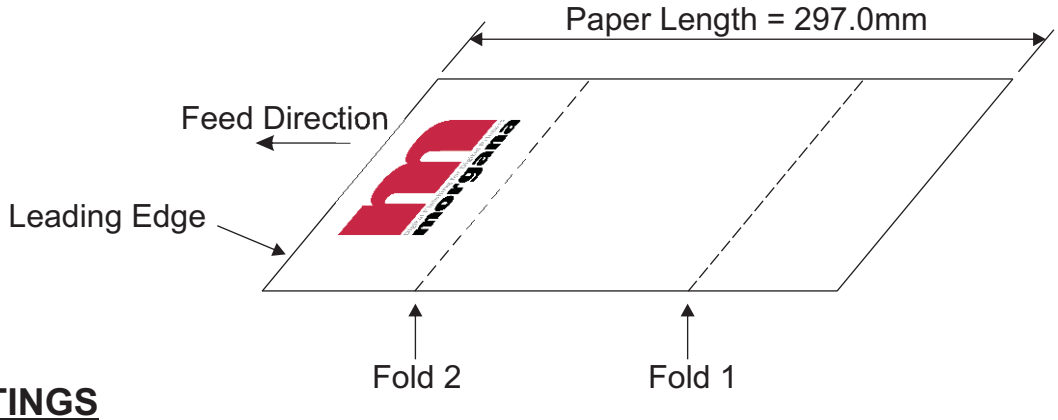
Folding can be micro adjusted for fine adjustment.

Micro adjust range is -5.0 to +5.0 with increments of 0.1mm

Setting Fold Positions Manually (Set By Position).
If you have selected the Ruler Icon from the paper settings page the fold positions can be set manually.

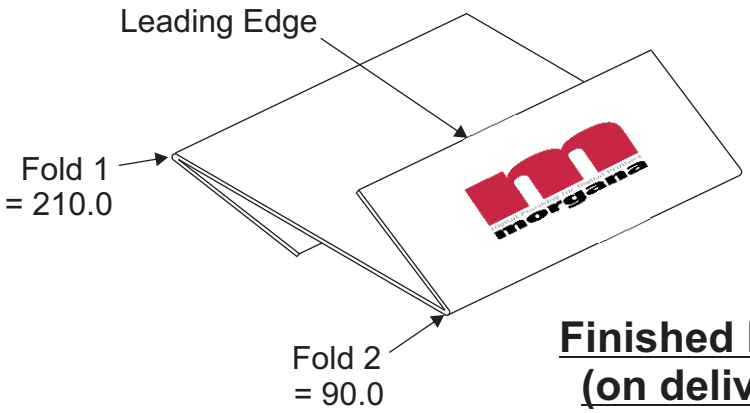
EXAMPLE 1. (Set Fold 1 to 210.0, Set Fold 2 to 90.0)





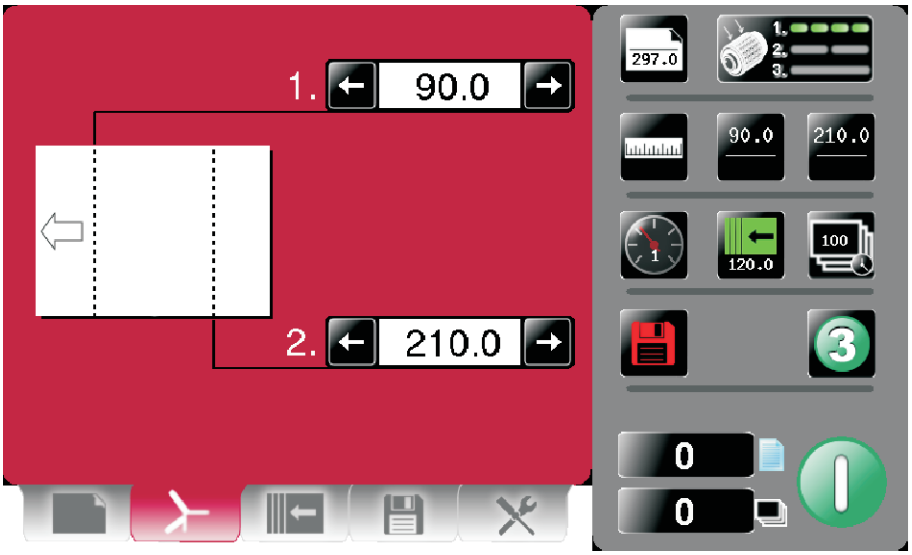
SETTINGS

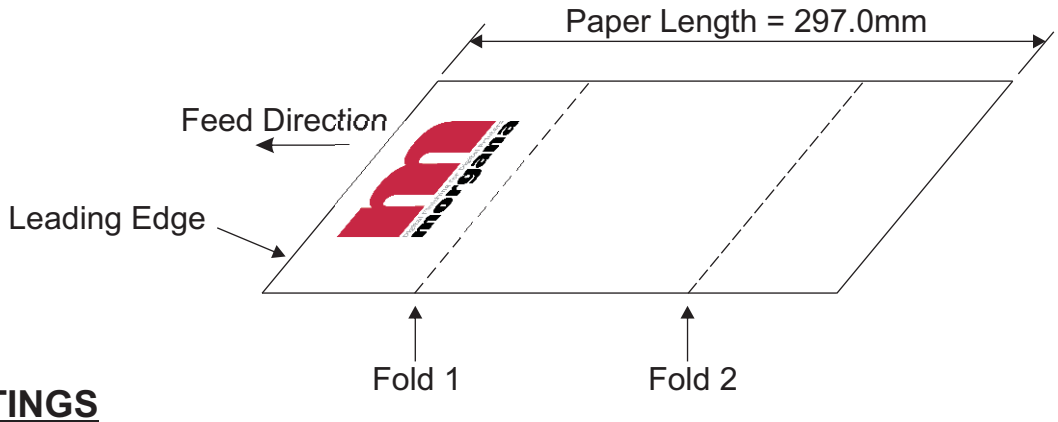
Fold 1 = 210.0mm
Fold 2 = 90mm
} All dimensions are from the leading edge of the paper



Finished Document (on delivery bed)

EXAMPLE 2. (Set Fold 1 to 90.0, Set Fold 2 to 210.0)

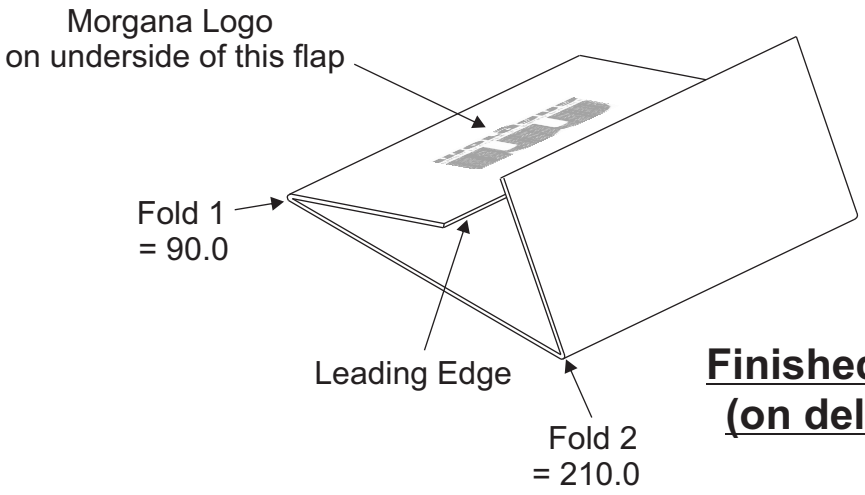




SETTINGS

Fold 1 = 90.0mm
Fold 2 = 210mm

All dimensions are from the leading edge of the paper



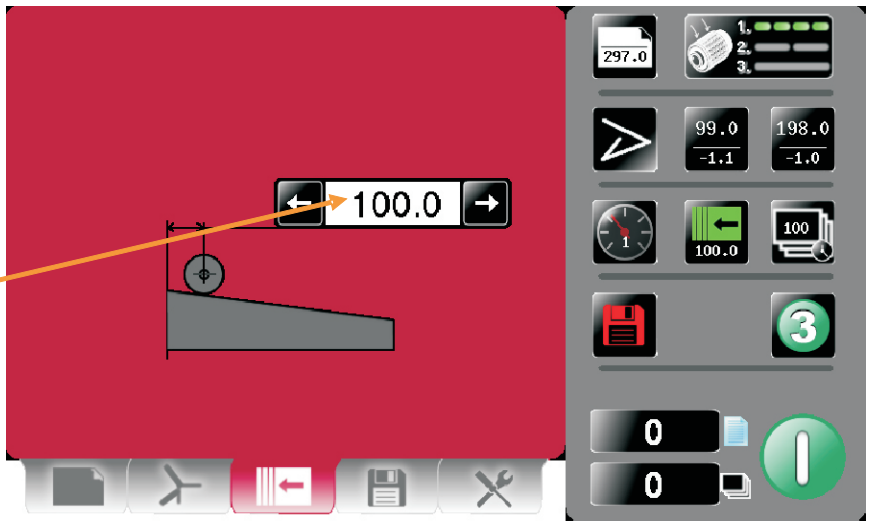
Finished Document (on delivery bed)

NOTE.

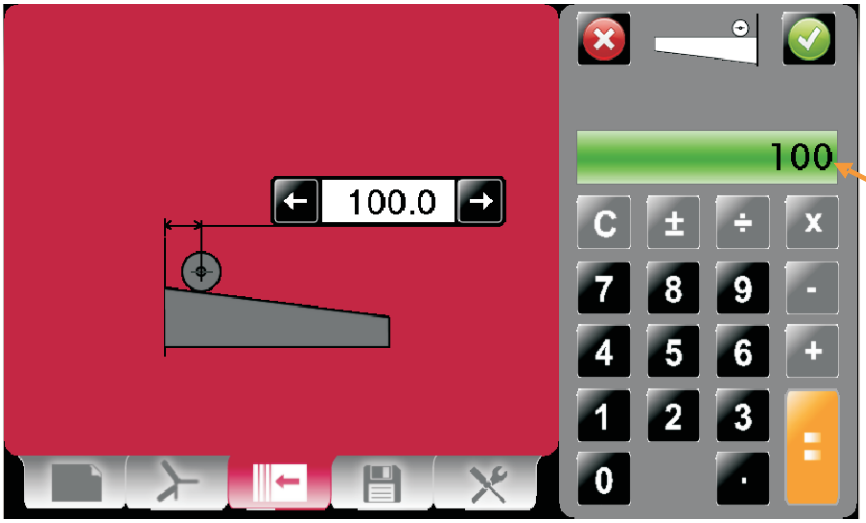
When only one fold is required on the sheet, set Fold 1 and Fold 2 to the same values.

Delivery Settings Pages.

To get to the Delivery setting page click the lower tab .



Roller position may be Micro adjusted by clicking Here.



Roller adjustment calculator

Status Screen.

Paper length - input from the paper setting screen.

Fold Positions & Trim settings

Currently selected Vacuum Suck setting - for slow pulse choose selection 2 - for stream feed choose selection 3

Currently selected fold type - can be one of the following.

Clicking in this area will take you to the fold settings page.

Speed selector - On selection a speed adjustment screen will appear

Batch quantity - this is input from the batch calculator on the paper setting screen - max. 999

Clicking in this area will take you to the store page
Green icon indicates settings are saved - a red icon would show that settings have changed but the job has not been saved.

Clicking in this area will take you to the delivery setting page.

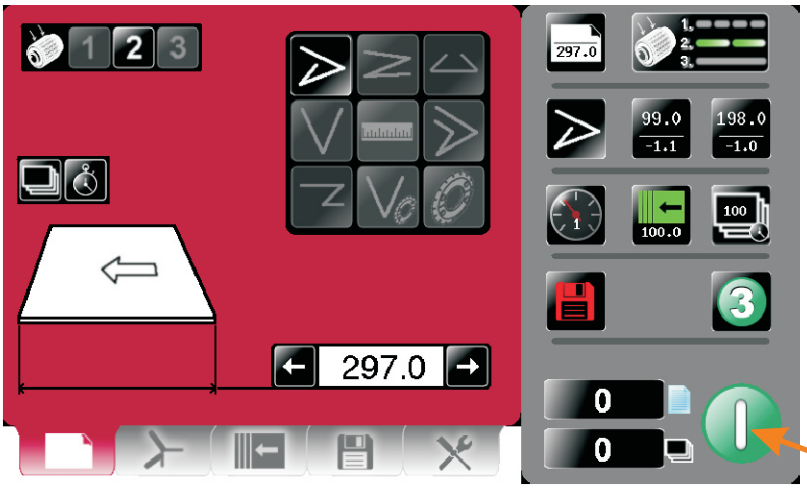
Select this button to produce 3 test sheets with the settings currently shown.

Sheet count -click to zero
A screen will appear to confirm that you want to reset the count.

Batch count - click to zero
A screen will appear to confirm that you want to reset the count.

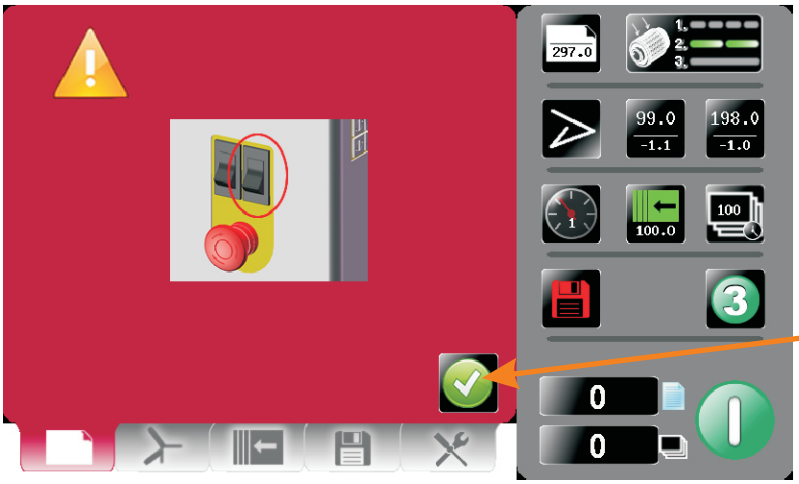
Click to start machine with settings currently shown - you will receive a notification if system switch is not on. Press again to stop Job

Run Job.



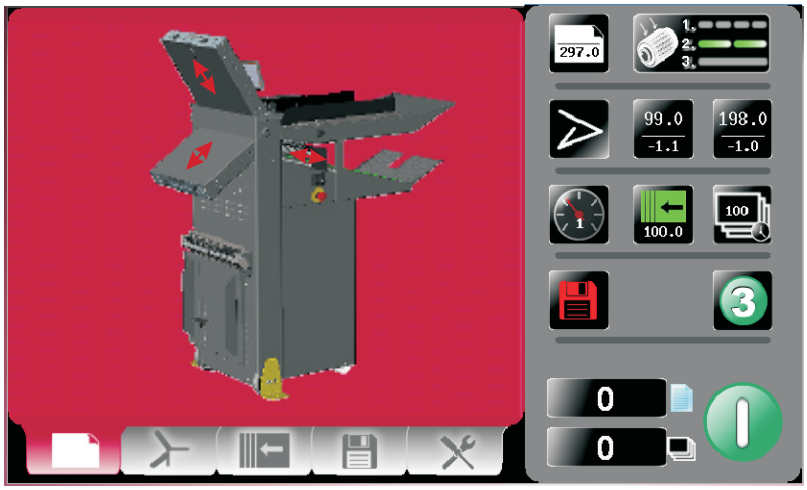
Click to run machine.

System Switch Not On, warning.

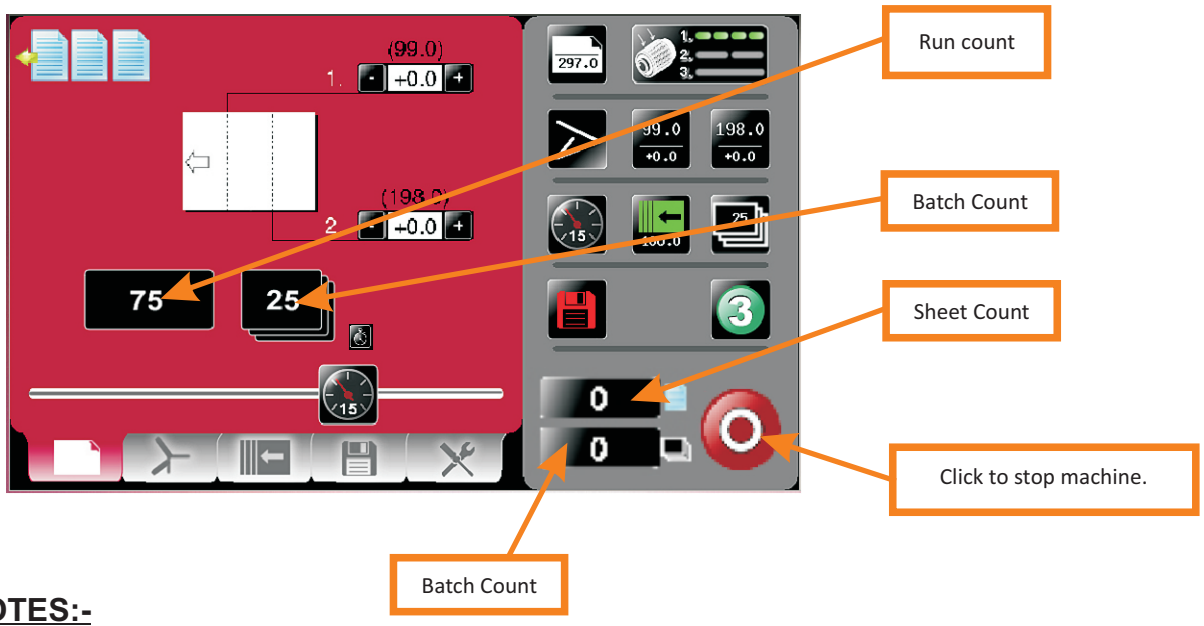


Click to confirm System switch is on. Switch Compressor switch on & then click run button again. Or click the icon to run three test sheets.

The display will briefly show that the fold plates and delivery roller are moving to their set positions, (as shown below).



The machine running screen will appear.



NOTES:-

1. The folds can be micro adjusted from the run screen, if necessary, while the job is still running.

2. The speed can also be adjusted from the run screen, while the job is still running.

Store Pages.

To get to the Store setting page click the lower tab or from the status area.

New Jobs.

Having set up your job you can give the job a name and save it to a store. You can also retrieve previously saved jobs, modify them or delete jobs you no longer require.

To create a new job name click in text area & keyboard will open to input job name.

Load existing job from store

Clicking to search currently stored jobs

Clicking to delete currently stored jobs

Current Job Name
Yellow Text Denotes Saved Job
Red Text Denotes Unsaved Job

Clicking to save job shown.

Keyboard for entering job name.

Return to Store Menu & click save icon to save job to store

Save confirmation screen.

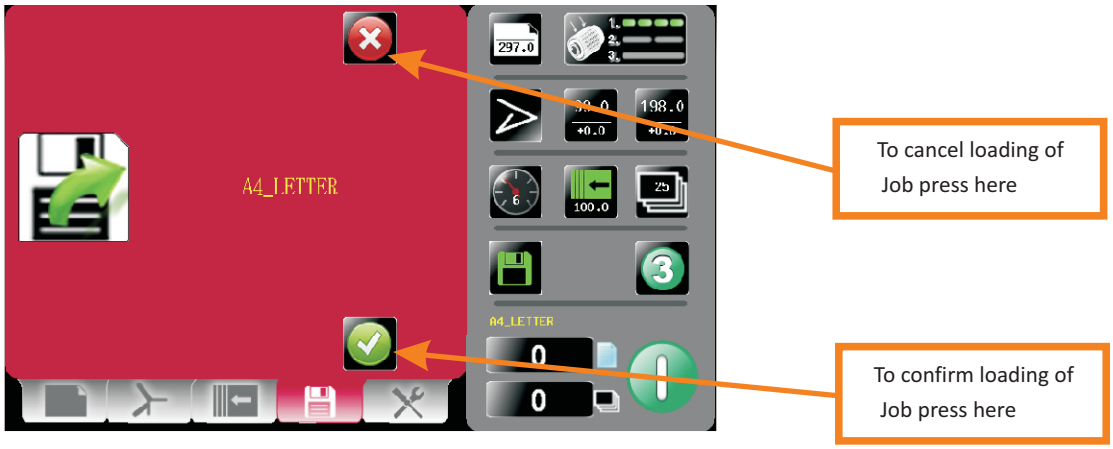
Search for current jobs to load or modify.

You can search for jobs by clicking the search icon , this will bring up the search keyboard for text input.

HALF
Type in job description or first few characters
Press search icon to start search
To change your mind & return to the previous screen click here.

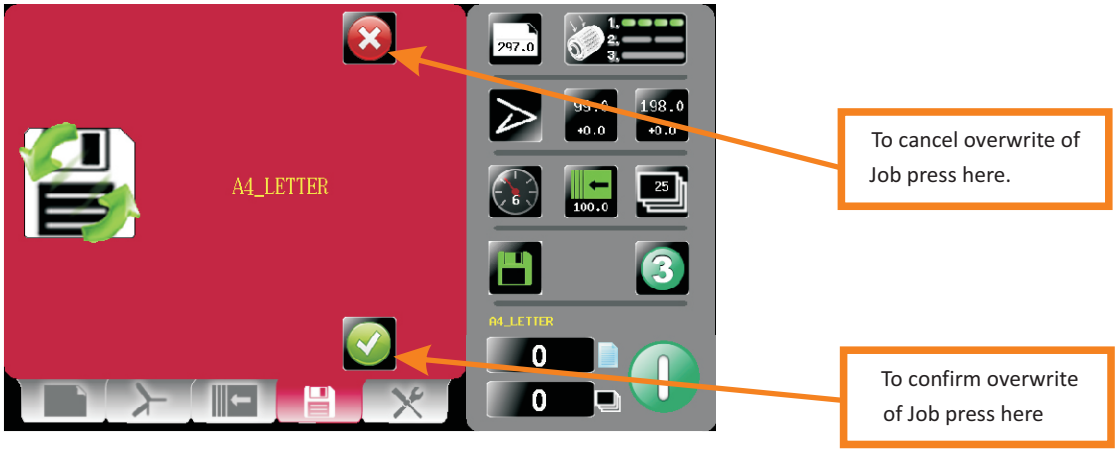
HALF
Jobs matching characters in text box will be shown in this area - selecting job from this area will show job settings in the right hand status area. Job selected will be shown in text box.
Toggle between search results & full list of jobs
Press to load job shown in text box.

Loading job confirmation screen.

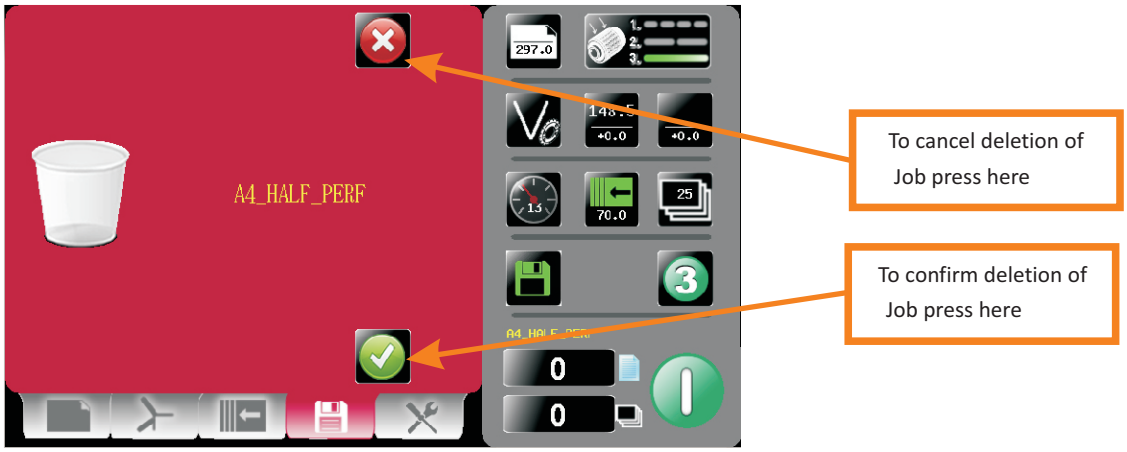


Loaded job may be modified and then re-saved as the same job name.

Overwrite job confirmation screen.

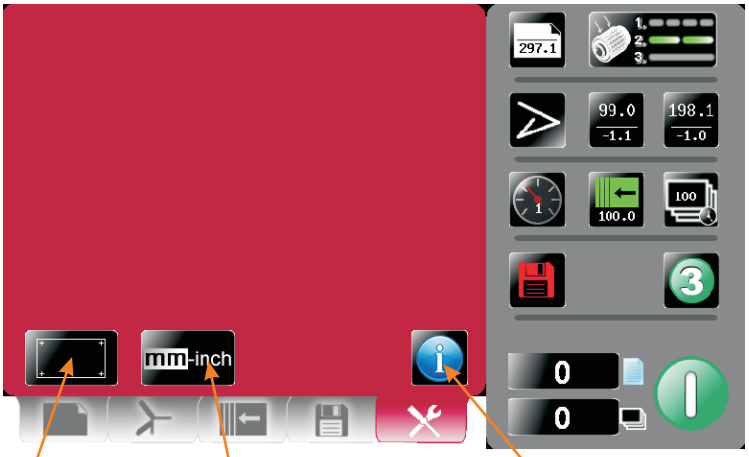


Delete job confirmation screen.



Tools Menu.

To get to the Tools page click the lower tab

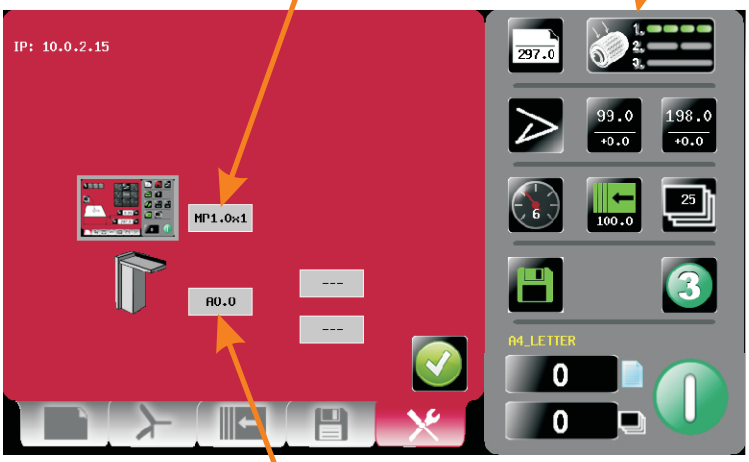


Touch Screen Calibration
See Page 27

Change Machine measurement settings, Imperial / Metric

Clicking this icon will show Machine program revision & Touch Screen software revision.

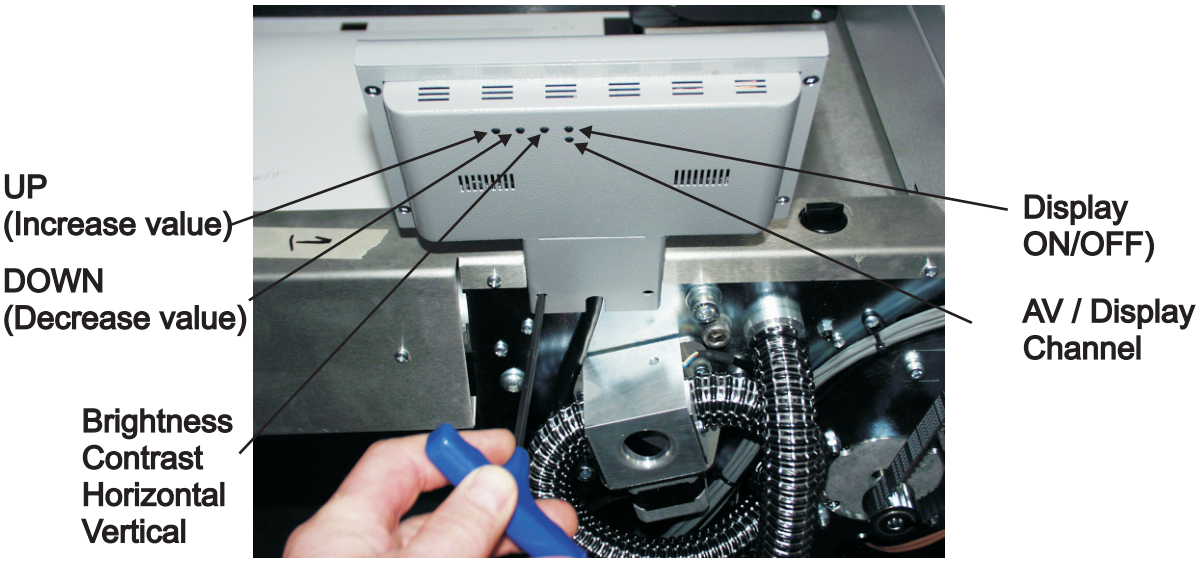
Touch screen software revision



Machine main board software revision

Touch Screen Calibration.

1. Switch the mains power on and wait for the main screen to appear before commencing to check the horizontal and vertical position of the display.
The position of the display within the surround is achieved by operating the button at the rear of the housing, press this a number of times to obtain the correct orientation required, move to the next button to move the position to centralize horizontal.



2. (i) Select the tools menu tab, and then Select the Touch Screen calibration icon.

(ii) Using a plastic pointer, soft leaded pencil, biro cap etc. and with gentle pressure. Touch the centre of the cross in each corner of the Touch Screen, as prompted, by the hand graphics. This procedure will calibrate the Touch Screen.

PLUG-IN PERFORATOR

The plug in perforator unit is used for perforating, scoring and when folding card cover stock; and should be stored on the rear stowage hooks.

ALWAYS UNPLUG POWER CONNECTORS BEFORE REMOVING FOLD PLATES OR PLUG-IN PERFORATOR.

Remove the top fold plate and fit the catch tray in position by hooking it over the opening for the top fold plate. The plug in perforator unit then locates the same as the fold plate and again, take care not to twist when fitting into position. You may need to turn the hand wheel and push the perforator unit inwards to engage the drive gear. Plug in the lower fold plate power connector into the perforator unit.

For all applications, the unit is set on the bench, using the scale to indicate the positions of the blades and hubs. It is important to spread the hubs evenly across the width of the work to reduce the risk of paper jams.

NOTES:-

1. **When perforating or scoring without folding, the upper fold plate must be removed and replaced with the lower fold plate**.
2. **If any of the fold plates, or the plug in perforator unit are removed from the machine; the guard circuit is automatically broken, for safety reasons, to prevent the fold rollers from rotating.**

Ensure that the tilt roller is at zero, plug the upper plate connector into the lower plate. To prevent damage to the unused upper plate when scoring or perforating, store safely on the stowage hooks at the reverse side of the machine.

Press the start button, the built in deflector on the fold plate will close automatically to the deflect position.

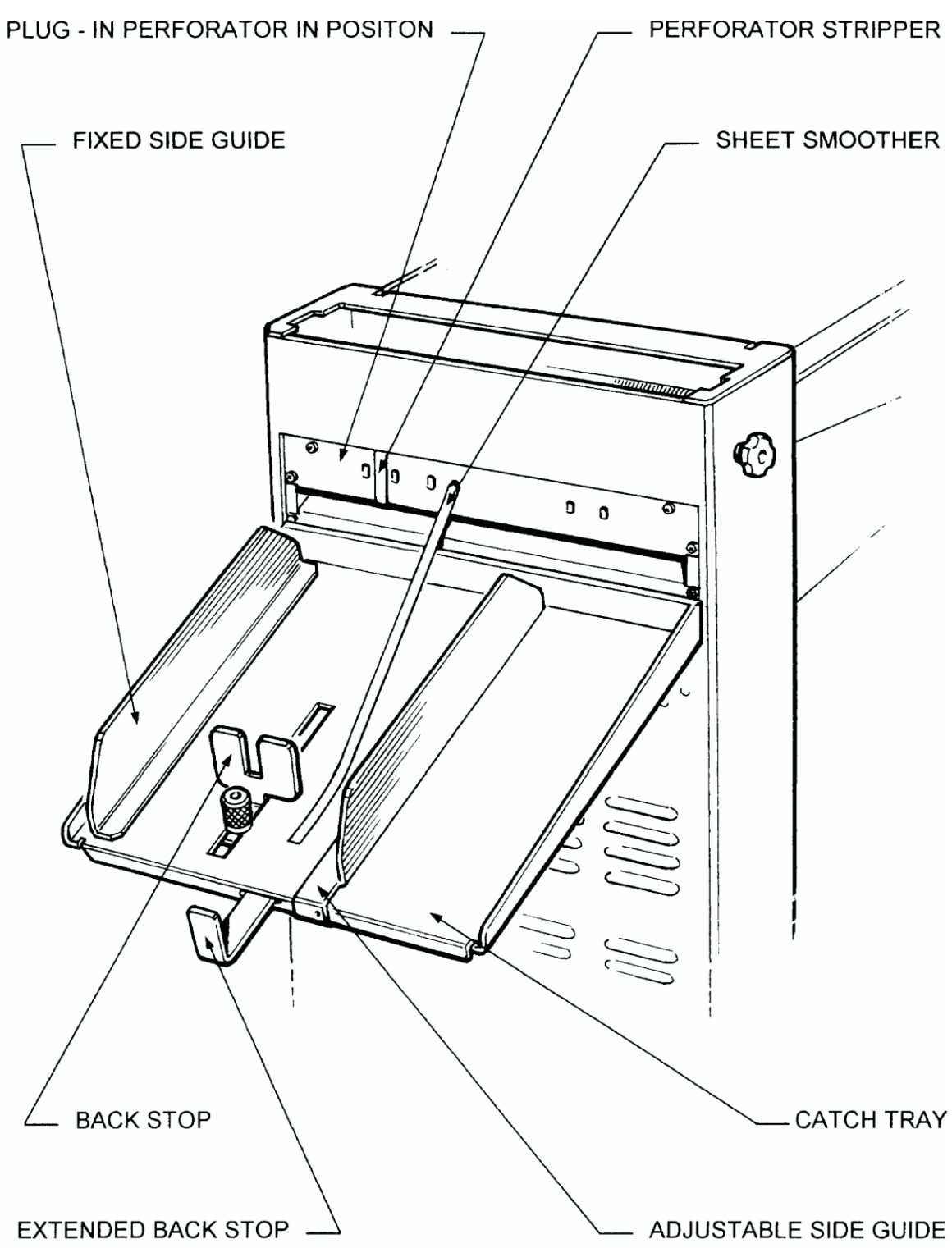
Note: - the Docufold Pro will automatically recognise that the lower plate is in the upper plate position and that the plug-in perforator unit is in the lower plate position.
Press the start button again to run the job, or the '3' button to run three test sheets.

Note: - Always run perforating or scoring jobs on pulse feed.

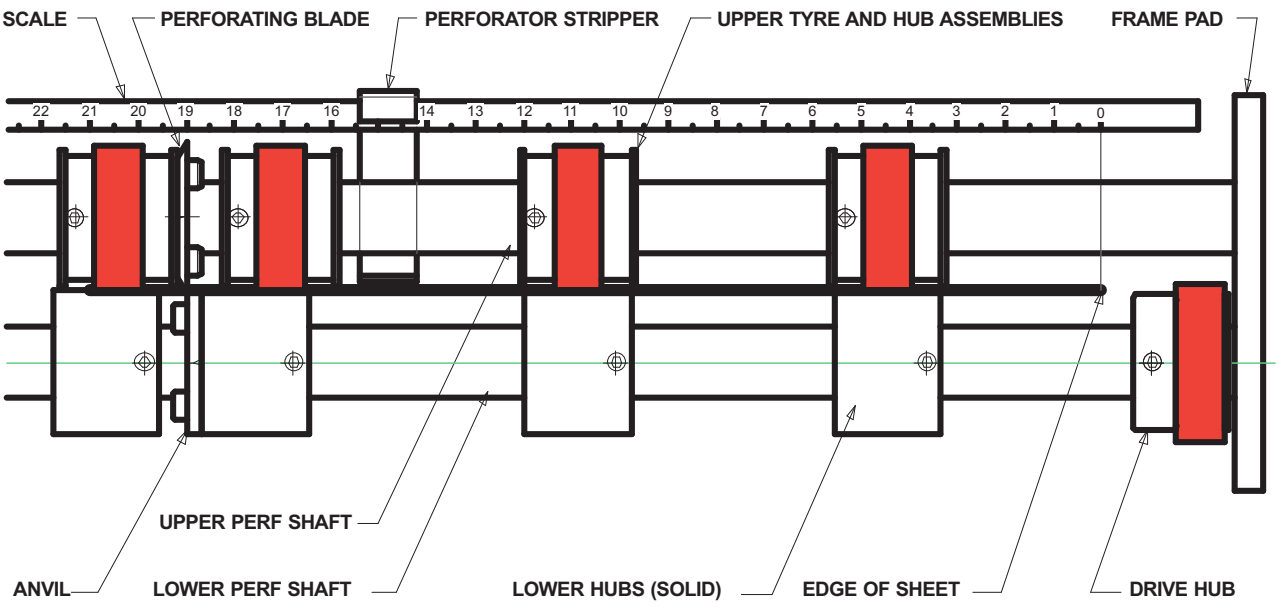
NOTE:-
When perforating or scoring with folding, the upper fold plate remains in position, at the top.

FITTING PERFORATER BLADES

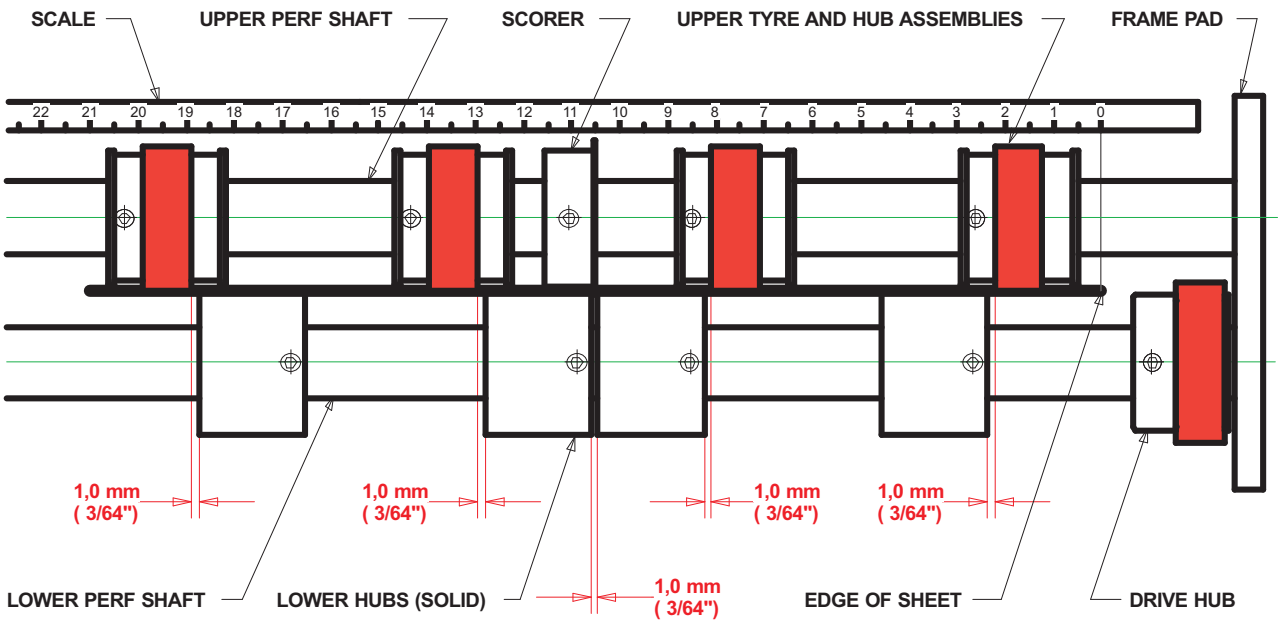
The perforator blades are split into two matching halves and are fitted to the upper hubs as shown in the drawing using the four screws supplied.



PLUG - IN PERFORATOR UNIT


SCALE
PERFORATING BLADE
PERFORATOR STRIPPER
UPPER TYRE AND HUB ASSEMBLIES
FRAME PAD
22 21 20 19 18 17 16 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0
UPPER PERF SHAFT
ANVIL
LOWER PERF SHAFT
LOWER HUBS (SOLID)
EDGE OF SHEET
DRIVE HUB

RECOMMENDED PERFORATOR SET - UP


SCALE
UPPER PERF SHAFT
SCORER
UPPER TYRE AND HUB ASSEMBLIES
FRAME PAD
22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1 0
1,0 mm (3/64")
1,0 mm (3/64")
1,0 mm (3/64")
1,0 mm (3/64")
LOWER PERF SHAFT
LOWER HUBS (SOLID)
1,0 mm (3/64")
EDGE OF SHEET
DRIVE HUB

RECOMMENDED SCORER SET - UP

SETTING PERFORATORS

Upper and lower hubs can be positioned on the shaft by unscrewing the 2mm-grub screw. Slide the hub with the blade attached along, the shaft into position to correspond to the work using the scale as a guide. For example, to perforate 20mm from the edge of an A4 sheet, you would set the blade at 190mm (210 minus 20). When positioned re-tighten the 2mm-grub screw. **Important - Do Not Over Tighten This Grub Screw**

Slide the hub with the anvil, up to the perforator blade and the remaining upper and lower hubs, set as the drawing, remembering to spread them to support the sheet fully across its width.

Clip the perforator stripper adjacent to the upper hub as shown. Plug the unit into position, fit the sheet smoother into position to hold the sheets down and run the machine at the slow speed to check position.

Adjust the backstop and side guide to suit the work.
For work longer than the backstop will allow, remove the backstop and use the extended backstop that is located underneath the catch tray.
There is a full range of perforator blades available as follows:

For fine perforation	56 tooth	-	Part Number 1.99-41
For Paper	28 tooth	-	Part Number 1.99-12
For heavier Stock	20 tooth	-	Part Number 1.99-10
For use with blades	Anvil	-	Part Number 1.99-35
Slitter set for cutting		-	Part Number 1.99-13

SCORING

It is possible to score work using the plug in perforator. The scorers are split in two halves, fitted to the upper shaft and set as shown in the drawing using the scale on the unit as a guide to position. The lower hubs are moved up to but just clear of the scoring blade. The actual gap is critical and may require some experimentation to obtain a satisfactory score line. As with perforating, the remaining hubs must be spread to support the sheet fully across its width.

Scorers available:

Type A	Part Number	6.99-05	for most card
Type B	Part Number	6.99-06	for deep score
Type D	Part Number	6.99-09	for paper

FOLDING CARD

For best results, the card material should always be printed cross grain as this causes less resistance when folding. Pre scoring of card stock is also recommended

By using the plug in perforator unit to deliver card, the problem of the stock curling will be minimised. Put the upper plate into the upper plate position and the plug-in perforator unit into the lower plate position. Plug in power connectors - upper into upper fold plate and lower into perforator unit.
Set the backstop and the moving side lay to suit the work. Set the paper length.
Press the start button, the upper plate will automatically move to half the length of the stack of cover stock.
Fine adjustments may be necessary to the fold position as described on page 16.

It is recommended that when folding card, the machine be set to batch after twenty sheets, which will allow easy off loading. For longer runs an optional rear delivery belt stacker (Assy. No. 9-09-01) is recommended to be used.

In the event of a paper jam, the sensor will cut out the main switch. The main fold rollers are linked to a clutch, which will prevent sheets continuing to feed.

PAPER JAMS

If for some reason a piece of paper jams in the machine, remove and check inside the fold plates. If there is paper jammed around the fold rollers take hold of a roller and wind them by hand to remove the jam. If it is impossible to wind the roller by hand, remove the roller assembly as described below. After clearing a paper jam, always check inside the fold plate (see Fold Plate Section) to make sure no torn pieces of paper are jammed inside the plate.

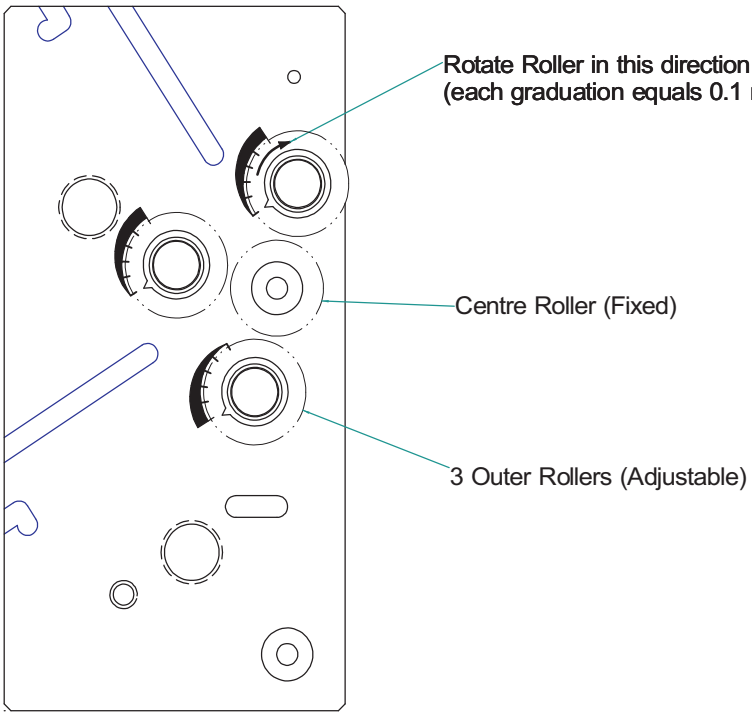
ROLLER ASSEMBLY - REMOVAL

The complete roller assembly unit can be removed from the machine simply by unscrewing the knobs (Y) on each side and taking hold of the rear roller and lifting out the unit. This is beneficial to clear paper jams, to clean the roller and for maintenance. With the roller assembly removed, the safety circuit prevents the machine from running. Replace the roller unit in the reverse sequence. Clean the rollers with a stiff brush between the grooves using QD wash supplied by Morgana.

ROLLER ADJUSTMENT

The unique fold roller design of your Morgana Docufold Pro will fold most paper stocks without the need for adjustment. If you have a requirement to fold very delicate or thicker stock or re-feeding to produce a cross-fold the fold roller gap can be easily adjusted as follows: -

1. Remove the roller assembly from the machine as described above.
2. Loosen the Cap Head Screw on the operators side of the roller that you wish to adjust (any of the 3 outer rollers) using the 5 mm Bondus 'L' wrench provided & release the M8 lock nut on the non-operators side with the 13 A/F spanner provided.
3. Insert the 4 mm hex ball driver into the socket screw at the end of the roller shaft and rotate in the required direction to adjust the roller gap.
4. The graphics on the inside of the roller side plate show which way to turn the roller to adjust the gap relative to the centre roller.
5. Re-tighten the half nuts & cap head screws to lock the roller into position.
6. Repeat procedure for each roller that you wish to adjust and then replace the roller assembly into the machine.
7. Reset the roller tilt knob (R) back to the zero central position and screw in the Clamping knobs (Y).


Rotate Roller in this direction to increase Gap
(each graduation equals 0.1 mm of gap adjustment)
Centre Roller (Fixed)
3 Outer Rollers (Adjustable)

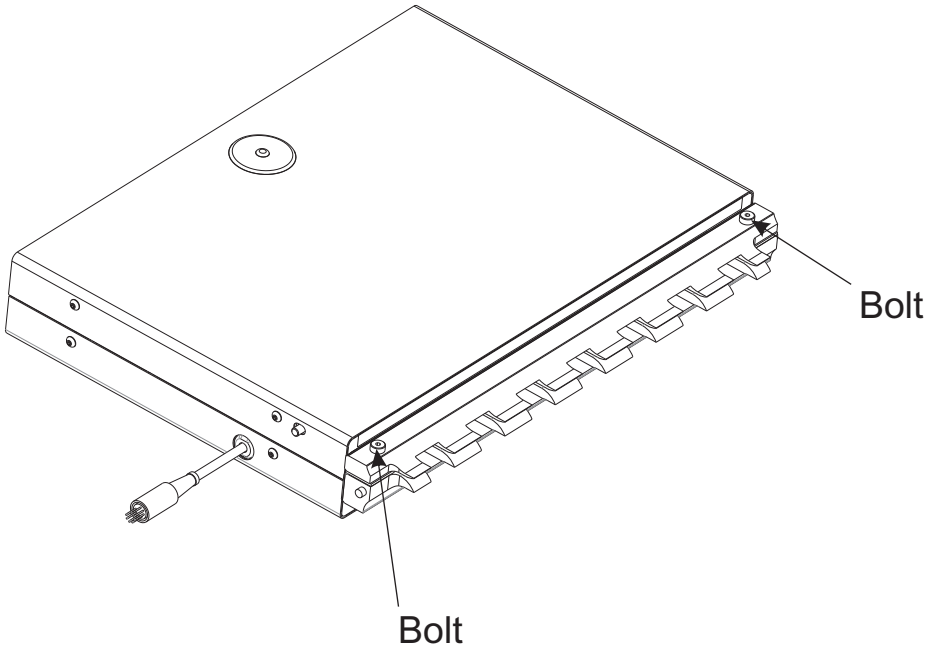
Section Through Roller Assembly

SENSOR CLEANING

The sensors to detect and count the sheets are located on the ends of the ball holder just next to the fold roller unit. If the counter is failing the sensor can be accessed for cleaning by removing the roller assembly as described on page 32. Clean by using a soft brush or damp cloth.

FOLD PLATES - MAINTENANCE

The fold plates can be opened up for maintenance, removing paper jams, cleaning, etc by removing the two bolts shown below. The fold plate can then be hinged open.



FOLDING TIPS AND TROUBLE SHOOTING:

SHEETS DIFFICULT TO FEED

Check that you have not got too many sheets in the feeder. Heavy-coated stock will not feed as high a pile as for example 80-gsm copier paper.

Make sure the moving side lay is not pushed in too tightly against the paper. Similarly, if the moving side lay is set too far away from the paper stack, this will allow the air to escape instead of blowing through the paper.

Make sure that the gap under the paper gate (B) is not set too low.

Turn the Air separation knob (E) to the high position.

Make sure that air distribution knob (D) is set correctly.

If the paper width varies you may need to trim the sheets to the same size.

If the paper is curling upwards the suction drum may not be able to pull the sheet downward to wrap around the drum for efficient feeding. You may need to bend the sheets downward prior to loading.

DOUBLE SHEET FEEDING

Make sure the gap under the paper gate (B) is not set too high.

Make sure the air distribution knob (D) and the air separation knob (E) are at the correct setting.

In extreme cases you may need to separate the sheets prior to loading.
Make sure you run on Pulse not Stream.

FOLD IS NOT SQUARE OR CONSISTENT

Check the sheets are all exactly the same size and are square before folding as you can only fold accurately if the material is consistent.

Make sure you have no foreign bodies such as fragments of torn paper inside the fold plates or the fold rollers.

Check that the fold plates are locked and located securely and that the roller tilt mechanism is set to zero and locked.

PAPER WILL NOT STACK CONSISTENTLY:

Make sure the feed is consistent before attempting adjustments to the Delivery Roller.

Set the delivery roller position as described in the manual. Sometimes a small repositioning of the roller will improve the stacking. See Delivery Roller (Page 19)

If the paper is too curly when being delivered, place the catch tray and plug in perforating unit with blades disengaged into position and deliver out the back. This applies to single fold applications only. If two folds are required, you may need to reduce the weight of stock to achieve the desired results.

PAPER WILL NOT DEFLECT WHEN USING ONE FOLD OR PERFORATING:

Check to make sure that the second plate is being used as the deflector.

Make sure that the plate is located securely and that the deflector bar is wound right to the end.

Set the tilt roller mechanism to zero.

Check that the material is not too heavy to deflect.

TOTAL AND BATCH COUNTER NOT WORKING:

Clean the sensors as described in the manual.

OVERLAP ERROR KEEPS APPEARING ON TOUCHSCREEN

If the overlap keeps tripping in and cutting off the machine, first check you are not feeding doubles and reset the feeder.

Overlap tripping can also mean that the machine is slowing slightly which may mean the material is too heavy.

Check that you have no foreign bodies or torn paper stuck inside the fold plates or machine.

MACHINE WILL NOT RESET

Your Docufold Pro is a mini computer; you must have a clean consistent power supply. Switch off at power switch (S), wait 20 seconds and re-power.

NO POWER TO MACHINE

If the touchscreen display fails to come on, check that isolator switch (S) is not pressed in. To release, turn knob clockwise.

Check power supply to the machine.

MAIN SWITCH CUTS OUT:

The feeder will cut out automatically after 100 seconds if the main switch is left on without the feed switch being activated.

The compressor inside the machine requires up to 28 amps to start running. You must have the machine plugged directly into a 30-amp ring main. Do not attempt to run the machine with an extension lead.

The main switch will cut out if you have a paper jam or overlap is indicated.

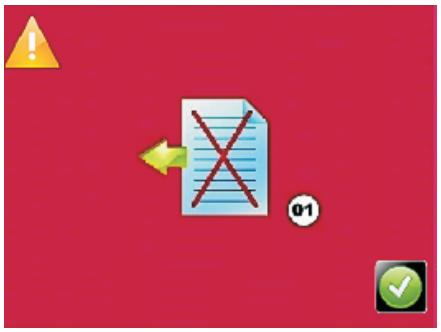
FOLD ROLLER REPLACEMENT:

Your Morgana Docufold Pro has been designed to make fold roller replacement an easy and low cost operation. Your local sales agent will be able to supply you with a complete replacement roller assembly which allows you to change the roller assembly yourself as described in the roller assembly removal section of this manual. You will need to send back to your agent the existing roller assembly.

Error Screens

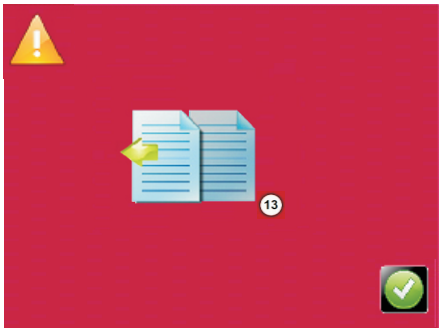
Sheet did not arrive.

If the machine stops and error message 01 is displayed on the touch screen, this indicates that the paper did not arrive at the end of the suck process; so the machine timed out. Press the green tick button and then press the start button.



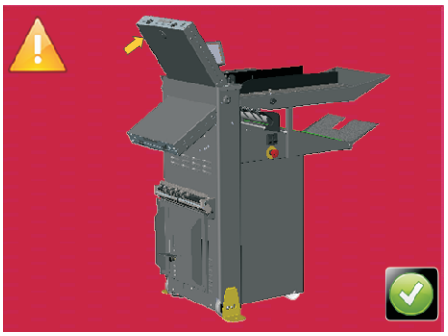
Overlap

If the machine stops and error message 13 is displayed on the touch screen, this indicates that the 'Lead Edge Sensor' has seen a sheet subsequent to the first one as being longer. Again this could actually be a longer sheet, OR it could be a sensor problem (if it is a recurring problem). Check that the paper gate has been set correctly.



Upper fold plate set out of range.

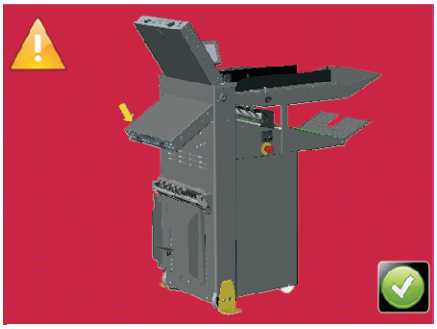
If the touchscreen shows the error screen shown below, this indicates that the fold that has been set for the upper fold plate is out of range.



Error Screens (continued)

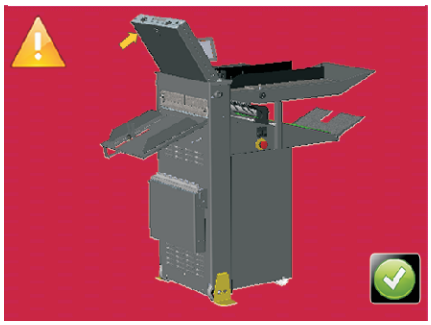
Lower fold plate set out of range.

If the touchscreen shows the error screen shown below, this indicates that the fold that has been set for the lower fold plate is out of range.



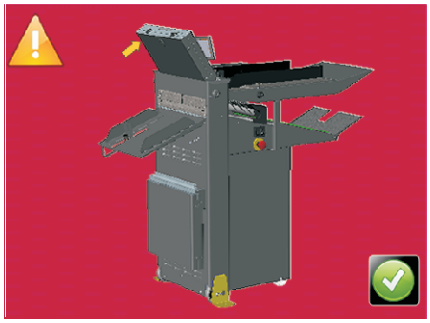
Incorrect fold plate fitted for perforating or scoring (without folding).

If the touchscreen shows the error screen shown below, this indicates that the wrong fold plate is fitted. When perforating or scoring (without folding) the **short fold plate** must be fitted in the upper slot position.



Incorrect fold plate fitted for perforating or scoring (with folding).

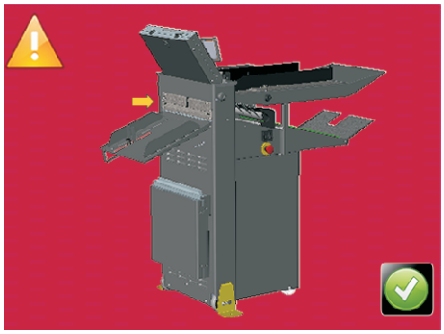
If the touchscreen shows the error screen shown below, this indicates that the wrong fold plate is fitted. When perforating or scoring (with folding) the **long fold plate** must be fitted in the upper slot position.



Error Screens (continued)

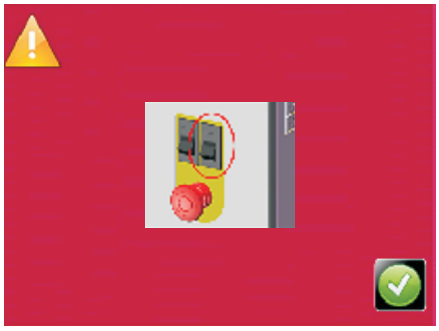
Perforating / Scoring unit not fitted.

If the touchscreen shows the error screen shown below, this indicates that the machine has been set for perforating or scoring (**with or without folding**) and the perforating / scoring unit has not been fitted.



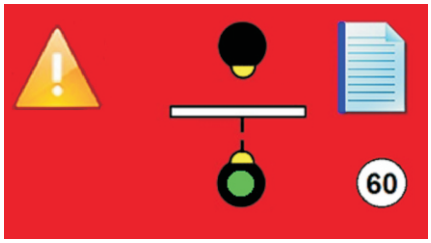
System switch not on.

If the touchscreen shows the error screen shown below, this indicates that the system switch must be switched to the ON position.



Lead Edge Sensor Fault

If the machine stops and error message 60 is displayed on the touch screen, this indicates that the lead edge sensor is blocked. Check that the paper path is clear. This error message could also mean that the lead edge sensors are faulty or need cleaning.



ITEM	PART NUMBER	QTY	DESCRIPTION
1	90 - 134	1	DOCUFOLD PRO OPERATORS MANUAL
2	90 - 018	1	ROLLER CLEANING KIT
3	650-040 650-041	1 1	POWER CORD - C19 - 3Pin - UK POWER CORD - C19 - 3Pin - USA
4	650-016	1	L6 - 15P Re-Wirable Plug (Used on USA Only)
5	617 -004	5	GLASS BALL
6	620 - 007	1	HEX BALL DRIVER - 2mm
7	620 - 020	1	HEX BALL DRIVER - 2.5mm
8	620 - 004	1	HEX BALL DRIVER - 4.0mm
9	620 - 006	1	ALLEN KEY - 3mm
10	620 - 025	1	BONDUS 'L' WRENCH - 2.5mm
11	620 - 027	1	BONDUS 'L' WRENCH - 5.0mm
12	620 - 032	1	COMBINATION SPANNER - 13 A/F
13	624 -018	1	DISPATCH BOX
(14)	1 - 99 - 35	1	ANVIL SET
(15)	1 - 99 - 41	1	PERFORATING SET - 56T - SLITTING
(16)	6 - 99 - 05	1	SCORING SET - TYPE A
17	71-083-01	2	OUTRIGGER FOOT
18	401-02-050-008	2	SCREW - PAN POZI TAPTITE - M5 X 8 LONG

WARNING.....
THE BLADES FOR ANVIL, PERFORATING, & SCORING SETS ARE SUPPLIED AS MATCHED PAIRS AND SHOULD NEVER BE MIXED-UP OR LEFT UN-PROTECTED AS SERIOUS DAMAGE WILL RESULT.

ITEM	PART NUMBER	DESCRIPTION
1	6-99-06	SCORING SET - TYPE B
2	6-99-09	SCORING SET - TYPE D
3	1-99-10	PERFORATING SET - 20T SLITTING
4	1-99-11	PERFORATING SET - 20T SLITTING - HEAVY DUTY
5	1-99-12	PERFORATING SET - 28T SLITTING
6	1-99-41	PERFORATING SET - 56T SLITTING
7	1-99-13	SLITTING BLADE SET
8	1-99-35	ANVIL SET
9	98-018-02	PERFORATOR STRIPPER SET - LONG
10	69-033	SHEET SMOOTHER - STACKER - LONG
11	6-99-36	PAPER PROFILE ROLLERS - SET (SPLIT)

ACCESSORIES....

....May be obtained from your dealer and fitted to your machine using the instructions supplied, or by consulting your operators manual.

OPTIONS....

....May also be obtained and fitted **by your dealer. You should not attempt to fit options yourself as specialist tools and knowledge are required.**

Technician Maintenance

It is recommended that your machine is fully serviced at least once every six months by a factory trained Service Engineer.

PART NUMBER	DESCRIPTION
75 - 06 - 02	TOUCH SCREEN ASSY - 7" (NEW CONTROLLER)
75 - 500 - 08	MINI ITX MOTHERBOARD - DOCUFOLD PRO
76 - 272	PSU ASSEMBLY - ATX12V - 300W
90 - 06 - 02	CONTROL PCB ASSY + CHIP-DOCUFOLD PRO-UL
90 - 08 - 01	PCB - FOLD PLATE MOTOR DRIVE
92 - 010	TRANSPORT BELT Delivery
92 - 027-01	DRIVE BELT - Delivery - Flat 12mm
93 - 021	FEED BELT
93 - 022	DRIVE BELT - Vacuum Roller
93 - 028	SMOOTHER - Delivery
93 - 042	LOWER SENSOR ASSEMBLY
94-088	UPPER SENSOR ASSEMBLY
95 - 189	DC MOTOR PCB ASSY.
95 - 150 - 01	HOSE - Exhaust
95 - 151 - 01	HOSE - Vacuum
95 - 152 - 01	HOSE - Sheet Separation
95 - 153 - 01	HOSE - Valve
95 - 187	POT & LEAD ASSEMBLY - DELIVERY ROLLER
96 - 028 - 02	FOLD ROLLER ASSEMBLY - Standard
96 - 031	DRIVE BELT - Large Roller Drive
96 - 049 - 02	FOLD ROLLER ASSEMBLY - Bottom
97 - 121	POT & LEAD ASSEMBLY - FOLD PLATE
97 - 076	STEPPER MOTOR & LEAD ASSEMBLY
174 - 19 - 01	RS232 ADAPTOR PCB ASSY
601 - 021	MAGNETIC ACTUATOR
601 - 111	TAPERED FERRULE - SR1520 - Ø7.9 x Ø13 x 23 LG.
606 - 030	SCALLOP KNOB Black
607 - 022	TWIN GRIP TIMING BELT
607 025	TIMING BELT
607 - 026	TIMING BELT
607 - 027	TIMING BELT
607 - 160	TIMING BELT - T2.5 /317.5 x 6MM WIDE
609 - 011	'O' RING
609 - 012	'O' RING - WHITE SILICON - Ø50 X Ø4
609 - 013	'O' RING
75-530-01	TRANSFORMER ASSEMBLY - 230V TO 110V

PART NUMBER	DESCRIPTION
609 - 014	'O' RING
609 - 023	‘O' RING
613 - 137	PLUNGER & SPRING ASSY
613 - 255	SOLENOID COIL
613 - 365	EMERGENCY STOP SWITCH
652 - 011	SWITCH - LOW CURRENT COIL - BLACK ROCKER
655 - 015	POWER SUPPLY UNIT - SWITCHED MODE - 24V
655 - 016	POWER SUPPLY UNIT - SWITCHED MODE - 48V
613-023	FUSE 3.15A - Fast Blow
681-015	FUSE 4A - Anti-surge
652-047	FUSE 15A - Anti-surge
681-020	FUSE 500mA - Anti-surge

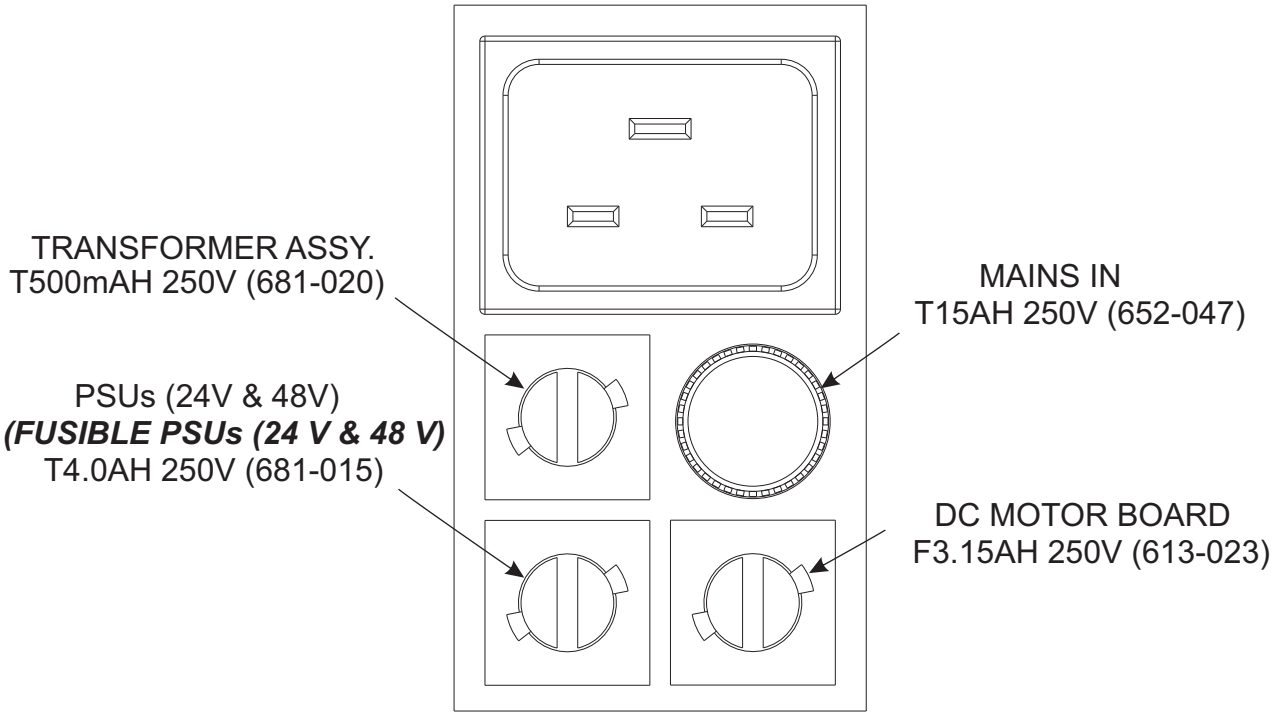
NOTE.....

The items listed above represent parts which are subject to wear, loss, or accidental damage, and is included for your guidance only.

Replacement of most of the parts fitted to your machine requires specialist knowledge and should therefore be entrusted to your dealer.

FUSE POSITIONS & RATINGS

(POSITION ET CLASSIFICATION DES FUSIBLES)



PRODUCT RECYCLING & DISPOSAL

European Union

Disposal Information for Commercial Users

Application of this symbol on your equipment is confirmation that you must dispose of this equipment in compliance with agreed national Procedures.

In accordance with European legislation end of life electrical and electronic equipment subject to disposal must be managed within agreed procedures.

Prior to disposal please contact your local dealer or representative for end of life take back information.

Disposal Information for Domestic Users

Application of this symbol on your equipment is confirmation that you should not dispose of the equipment in the normal household waste stream.

In accordance with European legislation, end of life electrical and electronic equipment subject to disposal must be segregated from household waste.

Private households within EU Member States may return used electrical and electronic equipment to designated collection facilities free of charge. Please contact your local disposal authority for information.

In some Member States when you purchase new equipment your local retailer may be required to take back your old equipment free of charge. Please ask your retailer for information.

Other Countries

Please contact your local waste authorities and request disposal information.

Rev.	Mod No.	Mod Description	Date	Mod By
3	ECO2811	Page 45 Changes:- T15A Fuse was F15A.	23/01/13	BAL